AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings of claims in the application:

LISTING OF CLAIMS:

1.-33. (CANCELLED)

34.(NEW) Mold (10) for fabricating a silica-based preform intended to be sintered, adapted to receive a slurry based on amorphous silica powder and a liquid, having an interior portion (14) and an exterior portion (12) adapted to delimit a wall (38) of said preform, at least in an area delimiting a usable portion of said wall (38), only one of said interior portion (14) and exterior portion (12), called the "permeable portion" (14), being permeable to said liquid, wherein in at least one area delimiting a usable portion of said wall at least one of said interior and exterior portions is deformable.

35.(NEW) Mold according to claim 34, wherein, in said area, the distance between said interior portion (14) and said exterior portion (12) is substantially constant.

36.(NEW) Mold according to claim 35, wherein, in said area, the distance between said interior portion (14) and said exterior portion (12) is less than 10 cm, preferably less than 5 cm.

37.(NEW) Mold according to claim 34, wherein said permeable portion (12) is made of a material absorbing said liquid in a similar manner to plaster.

38.(NEW) Mold according to claim 34, wherein said portion that is not permeable to said liquid, called the "impermeable portion" (14), includes a liner (30) deformable as a result of a modification of the dimensions of said preform during its fabrication.

39.(NEW) Mold according to claim 38, wherein said liner (30) is conformed to be removed or "peeled" toward the interior of said preform avoiding all contact with said preform.

40.(NEW) Mold according to claim 38 wherein said liner (30) is sufficiently deformable to allow forcible passage of a protuberance of said preform having a height less than or equal to 1.1 times the thickness of said liner (30) during the removal of said preform from the mold.

41.(NEW) Mold according to claim 38, wherein said liner (30) is made of a material that is inert with respect to said slurry.

42.(NEW) Mold according to claim 40, wherein said liner does not adhere to said preform or may be unstuck from said preform by deformation of said liner (30) during removal from the mold.

43.(NEW) Mold according to claim 38, wherein said liner (30) is made of silicone or a cellular material.

44.(NEW) Mold according to claim 38, wherein said liner (30) includes air injection holes (34).

45.(NEW) Mold according to claim 38, wherein said impermeable portion (14) includes a support (31) of said liner (30).

46.(NEW) Method of fabricating a sintered silica part, comprising the following steps:

a) casting a slurry based on amorphous silica powder and a liquid between an interior portion (14) and an exterior portion (12) of a mold (10) according to claim 34 to delimit a wall (38) of said part (40),

b) at least partially evacuating said liquid to obtain a preform,

c) removing said preform from the mold to obtain a green part,

d) further drying said green part,

e) sintering said green part,

wherein, in the step b), in at least one area delimiting a usable portion of said wall (38), said liquid is evacuated through one only of said interior portion (14) and said exterior portion (12) of said mold (10), called the "permeable portion" (12), the other portion being called the "impermeable portion" (14).

47.(NEW) Method according to claim 46, wherein, prior to the step e), a coating material is applied to said green part.

48.(NEW) Method according to claim 47, wherein said coating material is a precursor of silicon nitride (Si_3N_4).

49.(NEW) Method according to claim 46, wherein, during the step b), feeding of said mold (10) with slurry continues to compensate the evacuation of said liquid.

50.(NEW) Method according to claim 46, wherein, during the step b), to encourage the elimination of bubbles in said slurry, a reduced pressure is maintained in the container that contains the slurry before casting and/or independently in said mold.

51.(NEW) Method according to claim 46, wherein, said mold

(10), during the step c) of removal of the mold, said support (31) and said liner (30) are separated from said preform independently of each other.

52.(NEW) Method according to claim 46, wherein said slurry contains a powder based on amorphous silica mixed with a solvent, the particle size range of said powder conforming to the Füller-Bolomey law.

53.(NEW) Method according to claim 52, wherein said powder contains a mixture of at least two amorphous silica powders.

54.(NEW) Method according to claim 52, wherein said powder contains only particles whose size is from 0.1 to 620 µm.

55.(NEW) Method according to claim 52, wherein said powder includes only particles whose size is from 0.2 to 200 µm.

56.(NEW) Method according to claim 52, wherein said slurry contains more than 85% of dry material.

57.(NEW) Method according to claim 52, wherein said slurry has a viscosity from 1 to 30 Poises at the beginning of the casting step a).

58.(NEW) Method according to claim 52, wherein the dry fraction of said slurry contains more than 99.5% silica.

59.(NEW) Method according to claim 52, wherein said silica powder has a specific surface area from 0.01 to 20 m^2/g.

60.(NEW) Method according to claim 52, wherein said liquid is water.

61.(NEW) Method according to claim 52, wherein it includes a step of casting under pressure.

62.(NEW) Green part fabricated by the steps a) to c) of a method according to claim 46 and therefore having no divergence front, which has a three-point bending strength from 2 to 10 MPa.

63.(NEW) Green part according to claim 62, which has a density greater than 1.9 g/cm^3.

64.(NEW) Sintered silica part fabricated by a method according to claim 46, which has a three-point bending strength from 16 to 30 MPa.

65.(NEW) Sintered silica part according to claim 64, which has a density from 1.6 to 2.2 g/cm^3.

66.(NEW) Crucible (40) to fabricate polycrystalline silicon ingots comprising a sintered silica part according to claim 64.